# Engineering Interpretations

# **Building Site Development**

Soil properties influence development of building sites, including the selection of the site, the design of the structure, construction, post construction performance, and maintenance. Soil limitation ratings of slight, moderate, and severe are given for shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns, landscaping, and golf fairways.

#### Shallow Excavations

Shallow excavations are trenches or holes dug in the soil to a maximum depth of 5 or 6 feet. They are used for pipelines, sewer lines, telephone and power transmission lines, basements, open ditches, and cemeteries. The ratings are based on the soil properties that influence ease of digging and resistance to sloughing.

# **Dwellings With or Without Basements**

These are single-family houses of three stories or less. The foundation is assumed to be spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper, for houses without basements, or at a depth of 7 feet if a basement is constructed. The ratings are based on properties affecting soil strength and settlement under a load, and those that affect excavation and construction costs.

# Small Commercial Buildings

Limitation ratings are given for the undisturbed soil on which small commercial buildings of less than three stories without basements are built. The foundation is assumed to be placed on spread footings of reinforced concrete at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper.

## Local Roads and Streets

Limitation ratings are given for the use of soils for construction of improved local roads and streets that have all-weather surfacing, commonly of asphalt, gravel with binder in it, or concrete, and that are expected to carry automobile traffic all year. These roads and streets are graded to shed water, and conventional drainage measures are provided. With the probable exception of the hard surface, roads and streets are built mainly from the soil at hand.

# Lawns, Landscaping, and Golf Fairways

The soils are rated for their use in establishing and maintaining turf for lawns and golf fairways and ornamental trees and shrubs for residential type landscaping. The ratings are based on the use of soil material at the location with some land smoothing. Irrigation may or may not be needed and is not a criterion in rating. Traps, trees, roughs, and greens are not considered as part of the golf fairway. The properties considered are those listed that affect plant growth and trafficability after vegetation is established.

This subsection includes:

• (a) Building Site Development

#### Building Site Development

Map symbol and soil name	  Dwellings without bas	ements	Dwellings with basem	ents	Small commercial build	dings	Local roads and str	eets	   Lawns and landscap 	oing
	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value
BeB2: Peridge	    Not limited 	 	    Not limited   	       	  Limited  ~slope   (limited)	      0.68	    Not limited   		  Slightly limited  ~too acid   (slightly limited)	0.12
BoB: Goss	Moderately limited   ~shrink-swell   (moderately limited)   ~slope   (moderately limited)   ~large stones   (slightly limited)	0.30	   Moderately limited   ~slope   (moderately limited)   ~shrink-swell   (slightly limited)   ~large stones   (slightly limited)	  0.29 	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	  0.99    0.45    0.19	  Moderately limited  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	  0.45    0.19 	   Moderately limited   ~droughty   (moderately limited)   ~small stones   (slightly limited)   ~large stones   (slightly limited)	  0.31    0.27    0.01
BoE: Goss	Limited   ~slope   (limited)   ~shrink-swell   (moderately limited)   ~large stones   (slightly limited)	  0.99    0.45    0.19	Limited  ~slope   (limited)  ~shrink-swell   (slightly limited)  ~large stones   (slightly limited)	  0.29 	  valope  val	  1.00    0.45    0.19	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	  1.00    0.45    0.19	  very limited  ~slope   (very limited)  ~droughty   (moderately limited)  ~small stones   (slightly limited)	  1.00    0.31    0.27
BoF: Goss	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	  1.00    0.45    0.19	  Very limited  ~slope   (very limited)  ~shrink-swell   (slightly limited)  ~large stones   (slightly limited)	  0.29 	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	  1.00    0.45    0.19	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	  1.00    0.45    0.19	  Very limited  ~slope   (very limited)  ~droughty   (moderately limited)  ~small stones   (slightly limited)	  1.00    0.31    0.27

#### Building Site Development

Map symbol and soil name	  Dwellings without base	Dwellings with basem	ents	Small commercial buil	dings	Local roads and str	eets	Lawns and landscaping		
	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CaA: Willowfork	  Very limited  ~wetness   (very limited)  ~flooding   (very limited)	1.00	  Very limited  ~flooding   (very limited)  ~wetness   (very limited)  ~shrink-swell   (limited)	      1.00    1.00    0.81	  Very limited  ~flooding   (very limited)  ~wetness   (very limited)	      1.00    1.00	  very limited  ~wetness   (very limited)  ~flooding   (very limited)  ~low strength   (very limited)	1.00	  Very limited  ~wetness   (very limited)  ~flooding   (very limited)	1.00
CgB: Creldon	   Moderately limited   ~wetness   (moderately limited)   ~shrink-swell   (moderately limited)	0.45	  very limited  ~wetness   (very limited)  ~shrink-swell   (moderately limited)	ĺ	Limited  ~slope  (limited)  ~shrink-swell  (moderately limited)  ~wetness  (slightly limited)	0.68	  Moderately limited  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	0.45	  Slightly limited  ~wetness   (slightly limited) 	0.13
CgB2: Creldon	~wetness (moderately limited)	0.45	  very limited  ~wetness   (very limited)  ~shrink-swell   (moderately limited)	(	Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	  0.68    0.45    0.13	  Moderately limited  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	0.45	  Slightly limited  ~wetness   (slightly limited) 	0.13
CrB: Creldon	Moderately limited   ~wetness   (moderately limited)   ~shrink-swell   (moderately limited)	0.45	   Very limited   ~wetness   (very limited)   ~shrink-swell   (moderately limited) 	ĺ	   Moderately limited  ~slope   (moderately limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	  0.45    0.45    0.13	  Moderately limited  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	0.45	  Slightly limited  ~wetness   (slightly limited) 	0.13

### Building Site Development

Map symbol and soil name	  Dwellings without bas   	ements	   Dwellings with basem   	ents	  Small commercial build 	dings	   Local roads and str   	eets	   Lawns and landscap   	oing
	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CrB2: Creldon	   Moderately limited   ~wetness   (moderately limited)   ~shrink-swell   (moderately limited)	      0.51    0.45   	   Very limited   ~wetness   (very limited)   ~shrink-swell   (moderately limited)	    1.00    0.45   	   Moderately limited  ~slope   (moderately limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	0.45	  Moderately limited  ~shrink-swell  (moderately limited)  ~wetness  (slightly limited)	0.45	  Slightly limited  ~wetness   (slightly limited) 	0.13
Dg: Dunning	  Very limited  ~wetness   (very limited)  ~flooding   (very limited)  ~shrink-swell   (moderately limited)	  1.00  1.00  1.00  0.45	Very limited  -flooding (very limited)  -wetness (very limited)  -shrink-swell (moderately limited)	  1.00    1.00    0.36	  Very limited  ~flooding   (very limited)  ~wetness   (very limited)  ~shrink-swell   (moderately limited)	0.45	  Very limited  ~wetness   (very limited)  ~flooding   (very limited)  ~shrink-swell   (moderately limited)	1.00	  Very limited  ~wetness   (very limited)  ~flooding   (very limited)	  1.00    1.00 
Du: Dunning	  Very limited  ~wetness   (very limited)  ~flooding   (very limited)  ~shrink-swell   (moderately limited)	  1.00    1.00    0.45	Very limited  -flooding (very limited)  -wetness (very limited)  -shrink-swell (moderately limited)	  1.00 	  Very limited  ~flooding   (very limited)  ~wetness   (very limited)  ~shrink-swell   (moderately limited)	  1.00    1.00    0.45	  very limited  ~wetness   (very limited)  ~flooding   (very limited)  ~shrink-swell   (moderately limited)	1.00	  Very limited  ~wetness   (very limited)  ~too clayey   (very limited)  ~flooding   (moderately limited)	  1.00    1.00    0.60
EdB: Crestmeade	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	  1.00    1.00 	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	  1.00    1.00   	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)  ~slope   (slightly limited)	  1.00    0.99    0.15	  very limited  ~shrink-swell  (very limited)  ~wetness  (limited)	1.00	  Limited  ~wetness   (limited) 	0.99

#### Building Site Development

Map symbol and soil name	  Dwellings without bas 	ements	   Dwellings with basem   	ents	  Small commercial build 	dings	   Local roads and str 	eets	   Lawns and landscap 	oing
	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value   
EdB2: Crestmeade	  - Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	1.00	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	      1.00    1.00	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)  ~slope   (slightly limited)	    1.00    0.99    0.15	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	1.00	  Limited  ~wetness   (limited) 	0.99
EnB: Eldon	  - Moderately limited  ~shrink-swell   (moderately limited)	    0.45   	  Moderately limited  ~shrink-swell   (moderately limited) 	    0.45   	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	    0.68    0.45	  Moderately limited  ~shrink-swell   (moderately limited) 	    0.45   	  Moderately limited  ~large stones   (moderately limited)	0.45
FrA: Triplett	Very limited  wetness (very limited)  shrink-swell (very limited)	  1.00  1.00	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	    1.00    1.00	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	    1.00    0.99	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	1.00	Limited  ~wetness   (limited)	0.99
FrB: Hartville	  - Very limited  ~shrink-swell   (very limited)  ~wetness   (moderately limited)	    1.00    0.51 	  very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	    1.00    1.00 	  Very limited  ~shrink-swell   (very limited)  ~slope   (limited)  ~wetness   (slightly limited)	  1.00    0.68    0.13	  Very limited  ~shrink-swell   (very limited)  ~wetness   (slightly limited)	1.00	  Slightly limited  ~wetness   (slightly limited)   	0.13

#### Building Site Development

Map symbol and soil name	Dwellings without bas	sements	Dwellings with basem   	nents	Small commercial buil	ldings	Local roads and sti	reets	Lawns and landscap   	ping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
GaB: Gasconade	Not Rated  Not Rated   ~hard bedrock <20"   (very limited)   ~large stones   (slightly limited)	1.00	  Very limited  ~hard bedrock <40"  (very limited)  ~large stones  (slightly limited)	    1.00    0.09 	  Very limited  ~hard bedrock <20"   (very limited)  ~slope   (limited)  ~large stones   (slightly limited)	1.00	  Very limited  ~hard bedrock <20"   (very limited)  ~large stones   (slightly limited)	1.00	  Very limited  ~shallow to bedrock  (very limited)  ~droughty  (very limited)  ~large stones >30%  (very limited)	  1.00    1.00    1.00
GaE: Gasconade	Not Rated   Not Rated   Not Rated     ~hard bedrock <20"   (very limited)   ~slope   (limited)	1.00	Very limited  -hard bedrock <40"   (very limited)  -slope   (limited)  -large stones   (slightly limited)	  1.00    0.99    0.09	  Very limited  ~hard bedrock <20"   (very limited)  ~slope   (very limited)  ~large stones   (slightly limited)	  1.00    1.00    0.09	Very limited   ~hard bedrock <20"   (very limited)   ~slope   (very limited)   ~large stones   (slightly limited)	1.00	  Very limited  ~shallow to bedrock  (very limited)  ~droughty  (very limited)  ~slope  (very limited)	  1.00    1.00    1.00
GaF: Gasconade	Not Rated  Not Rated   ~hard bedrock <20"   (very limited)   ~slope   (very limited)	1.00	Very limited   -hard bedrock <40"   (very limited)   -slope   (very limited)   -large stones   (slightly limited)	1.00	  Very limited  ~hard bedrock <20"   (very limited)  ~slope   (very limited)  ~large stones   (slightly limited)	  1.00    1.00    0.09	  Very limited  ~hard bedrock <20"   (very limited)  ~slope   (very limited)  ~large stones   (slightly limited)	1.00	Very limited   ~slope   (very limited)   ~shallow to bedrock   (very limited)   ~droughty   (very limited)	  1.00    1.00    1.00
GsB: Glensted	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	1.00	  Very limited  ~wetness   (very limited)  ~shrink-swell   (limited)		  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)  ~slope   (slightly limited)	  1.00    0.99    0.15	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	1.00	  Limited  ~wetness   (limited) 	    0.99     

#### Building Site Development

Map symbol and soil name	  Dwellings without base 	ements	   Dwellings with basem   	ents	  Small commercial bui: 	ldings	Local roads and str	eets	   Lawns and landsca 	ping
	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value   _	Rating class and limiting features	Value	Rating class and limiting features	Value   _
GsB2: Glensted	! -	      1.00    1.00	  Very limited  ~wetness   (very limited)  ~shrink-swell   (limited)	(	  Very limited  ~shrink-swell  (very limited)  ~wetness  (limited)  ~slope  (slightly limited)	  1.00    0.99    0.15	  Very limited  ~shrink-swell  (very limited)  ~wetness  (limited)	1.00	  Limited  ~wetness   (limited) 	0.99
Hu: Sturkie	  Very limited  ~flooding   (very limited)	  1.00   	  very limited  ~flooding   (very limited)	1.00	  Very limited  ~flooding   (very limited)	1.00	  Very limited  ~flooding   (very limited)  ~low strength   (very limited)	1.00	  Very limited  ~flooding   (very limited)	1.00
Ls: Lindside	~flooding   (very limited)	  1.00    0.51	  Very limited  ~flooding   (very limited)  ~wetness   (very limited)	ĺ	  Very limited  ~flooding   (very limited)  ~wetness   (slightly limited)	1.00	  Very limited  ~flooding   (very limited)  ~wetness   (slightly limited)	1.00	Very limited   ~flooding   (very limited)   ~wetness   (slightly limited)	1.00
McB: Mcgirk	~wetness (very limited)	  1.00    1.00   	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	[	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)  ~slope   (slightly limited)	1.00	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	1.00	Limited  ~wetness   (limited)	0.99

#### Building Site Development

Map symbol and soil name			   Dwellings with basem   	ents	Small commercial build	dings	   Local roads and str 	eets	   Lawns and landscar 	oing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
McB2: Mcgirk	~wetness (very limited)	1.00	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	1.00	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)  ~slope   (slightly limited)	      1.00    0.99    0.15	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	1.00	Limited  ~wetness   (limited)	0.99
Me: Melvin	~wetness (very limited)	  1.00    1.00	  Very limited  ~flooding   (very limited)  ~wetness   (very limited)	1.00	  Very limited  ~flooding   (very limited)  ~wetness   (very limited)	  1.00    1.00	  Very limited  ~wetness   (very limited)  ~flooding   (very limited)	1.00	  very limited  ~wetness  (very limited)  ~flooding  (moderately limited)	1.00
On: Leta	  Very limited  ~flooding   (very limited)  ~wetness   (moderately limited)	0.59	  Very limited  ~flooding  (very limited)  ~wetness  (very limited)  ~shrink-swell  (slightly limited)	1.00	  Very limited  ~flooding   (very limited)  ~wetness   (slightly limited)	  1.00    0.28 	  Very limited  ~flooding   (very limited)  ~wetness   (slightly limited)	1.00	  Very limited  ~too clayey  (very limited)  ~flooding  (moderately limited)  ~wetness  (slightly limited)	  1.00    0.60    0.28
RaA: Moniteau	~wetness (very limited)	  1.00    0.45	Very limited   ~flooding   (very limited)   ~wetness   (very limited)   ~shrink-swell   (slightly limited)	  1.00    1.00    0.30	  Very limited  ~flooding   (very limited)  ~wetness   (very limited)  ~shrink-swell   (moderately limited)	  1.00    1.00    0.45	  Very limited  ~low strength   (very limited)  ~wetness   (very limited)  ~flooding   (very limited)	1.00	  very limited  ~wetness  (very limited)  ~flooding  (moderately limited)	1.00
Rw: Haynie			  Very limited  ~flooding   (very limited)	1.00	  Very limited  ~flooding   (very limited)	    1.00	  Very limited  ~flooding   (very limited)		  Very limited  ~flooding   (very limited)	11.00

#### Building Site Development

Map symbol and soil name	Dwellings without bas	sements	Dwellings with basen	nents	Small commercial buil	ldings	Local roads and str	reets	Lawns and landscar	ping
	Rating class and limiting features	Value	Rating class and limiting features	Value 	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Sa: Carr	Very limited  ~flooding   (very limited)	1.00	  Very limited  ~flooding   (very limited)	1.00	Very limited  ~flooding   (very limited)	1.00	Very limited  ~flooding   (very limited)	1.00	  Moderately limited  ~flooding   (moderately limited)	0.60
Sb: Sarpy	  Very limited  ~flooding   (very limited) 	1.00	  Very limited  ~flooding   (very limited)	11.00	  Very limited  ~flooding   (very limited)	1.00	  Very limited  ~flooding   (very limited)	1.00	  Limited  ~droughty   (limited)  ~flooding   (moderately limited)	  0.69    0.60
Sc: Sarpy	  Very limited  ~flooding   (very limited) 	1.00	  Very limited  ~flooding   (very limited) 	1.00	  Very limited  ~flooding   (very limited) 	1.00	  Very limited  ~flooding   (very limited) 	1.00	  Limited  ~droughty   (limited)  ~flooding   (moderately limited)  ~too sandy   (moderately limited)	0.50
SeA: Crestmeade	  Very limited  ~wetness  (very limited)  ~shrink-swell  (very limited)	1.00	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	1.00	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	  1.00    0.99	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	1.00	  Limited  ~wetness   (limited) 	0.99
SeB: Crestmeade	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	1.00	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)		  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)  ~slope   (slightly limited)	  1.00    0.99    0.15	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	1.00	  Limited  ~wetness   (limited) 	0.99

#### Building Site Development

Map symbol and soil name	  Dwellings without base	ements	Dwellings with basem	ents	  Small commercial buil	dings	Local roads and str	eets	   Lawns and landscap 	ping
	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value
SeB2: Crestmeade	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	      1.00    1.00	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	ĺ	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)  ~slope   (slightly limited)	      1.00    0.99    0.15	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	1.00	Limited  ~wetness   (limited) 	0.99
UnB2: Union	Moderately limited   ~wetness   (moderately limited)   ~shrink-swell   (moderately limited)	0.45	  very limited  ~wetness   (very limited)  ~shrink-swell   (moderately limited)	1.00	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	  0.68    0.45    0.13	  Moderately limited  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	0.45	Slightly limited  ~wetness   (slightly limited)	0.13
UnB3: Union	~wetness (moderately limited)	0.45	  Very limited  ~wetness   (very limited)  ~shrink-swell   (moderately limited)	ĺ	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	0.68	  Moderately limited  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited) 	0.45	Slightly limited ~wetness (slightly limited)	0.13
UnC2: Union	  Limited  ~slope   (limited)  ~wetness   (moderately limited)  ~shrink-swell   (moderately limited)	  0.83    0.51    0.45	  very limited  ~wetness   (very limited)  ~slope   (limited)  ~shrink-swell   (moderately limited)	  1.00    0.83    0.45	(moderately limited)	  1.00    0.45    0.13	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	0.84	Limited <pre> ~slope (limited)  ~wetness (slightly limited)  </pre>	0.84

#### Building Site Development

Map symbol and soil name	  Dwellings without base	ements	Dwellings with basem	ents	  Small commercial buil	dings	Local roads and str	eets	   Lawns and landscap	oing
	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
UnC3: Union	  Limited  ~slope   (limited)  ~wetness   (moderately limited)  ~shrink-swell   (moderately limited)	0.83	   Very limited   ~wetness   (very limited)   ~slope   (limited)   ~shrink-swell   (moderately limited)	ĺ	  very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	   1.00   0.45   0.13	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	0.84	Limited  ~slope   (limited)  ~wetness   (slightly limited)	0.84
UnD2: Wrengart	  Very limited  ~slope   (very limited)  ~wetness   (moderately limited)  ~shrink-swell   (moderately limited)	0.45	  Very limited  ~wetness   (very limited)  ~slope   (very limited)	ĺ	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	  1.00    0.45    0.15	  Very limited  ~slope   (very limited)  ~low strength   (very limited)  ~shrink-swell   (moderately limited)	  1.00    1.00    0.45	  very limited  ~slope   (very limited)  ~wetness   (slightly limited)	1.00
UtB2: Union	~wetness (moderately limited)	0.45	  Very limited  ~wetness   (very limited)  ~shrink-swell   (moderately limited)	ĺ	Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	  0.68    0.45    0.13	  Moderately limited  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	0.45	  Slightly limited  ~wetness   (slightly limited) 	0.13
UtC2: Union	  Limited  ~slope   (limited)  ~wetness   (moderately limited)  ~shrink-swell   (moderately limited)	  0.83    0.51    0.45	  very limited  ~wetness   (very limited)  ~slope   (limited)  ~shrink-swell   (moderately limited)	ĺ	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	  1.00    0.45    0.13	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	  0.84    0.45    0.13	  Limited  ~slope   (limited)  ~wetness   (slightly limited) 	0.84

#### Building Site Development

Map symbol and soil name	Dwellings without bas	ements	Dwellings with basem	ents	Small commercial buil	dings	Local roads and str	eets	Lawns and landsca	ping
	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
W: Water	  Not rated		  Not rated		  Not rated		  Not rated		  Not rated	
WdB2: Weller	  Very limited  ~shrink-swell  (very limited)  ~wetness  (moderately limited) 	  1.00    0.52 	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	    1.00    1.00   	  Very limited  ~shrink-swell   (very limited)  ~slope   (limited)  ~wetness   (slightly limited)	  1.00    0.68    0.15	  Very limited  ~shrink-swell   (very limited)  ~wetness   (slightly limited)	1.00	  Slightly limited  ~wetness   (slightly limited) 	0.15
We: Lowassie	Very limited   ~wetness   (very limited)   ~ponded   (very limited)   ~shrink-swell   (very limited)	1.00	  Very limited  ~ponded   (very limited)  ~wetness   (very limited)  ~shrink-swell   (slightly limited)	  1.00    1.00    0.27	Very limited   ~ponded (wetness)   (very limited)   ~wetness   (very limited)   ~shrink-swell   (very limited)	  1.00    1.00    1.00	  Very limited  ~low strength   (very limited)  ~ponded (wetness)   (very limited)  ~wetness   (very limited)	1.00	  Very limited  ~wetness   (very limited)  ~ponded (wetness)   (very limited)	1.00
WfB2: Winfield	  Moderately limited  ~shrink-swell   (moderately limited)  ~wetness   (moderately limited)	0.45	  Limited  ~wetness   (limited)  ~shrink-swell   (moderately limited)	0.99	(limited)	    0.68    0.45	  Moderately limited  ~shrink-swell   (moderately limited) 	0.45	  Not limited   	
WfC2: Winfield	Limited   ~slope   (limited)   ~shrink-swell   (moderately limited)   ~wetness   (moderately limited)	0.83	  Limited  ~wetness   (limited)  ~slope   (limited)  ~shrink-swell   (moderately limited)	  0.99    0.83    0.36	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45   	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	0.84	  Limited  ~slope   (limited)	0.84

#### Building Site Development

Map symbol and soil name	  Dwellings without bas   	ements	   Dwellings with basem   	ents	  Small commercial build 	dings	Local roads and str	eets	   Lawns and landscap 	oing
	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value   
WfD2: Winfield	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~wetness   (moderately limited)	    1.00    0.45    0.37	  Very limited  ~slope   (very limited)  ~wetness   (limited)  ~shrink-swell   (moderately limited)	  0.99    0.36	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	    1.00    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	    1.00    0.45	  Very limited  ~slope   (very limited)	1.00
WfF2: Winfield	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~wetness   (moderately limited)	  1.00    0.45    0.37	  Very limited  ~slope   (very limited)  ~wetness   (limited)  ~shrink-swell   (moderately limited)	  0.99    0.36	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)	1.00
WtB: Winfield	Moderately limited  ~shrink-swell   (moderately limited)  ~wetness   (moderately limited)	    0.45    0.37	  Limited  ~wetness   (limited)  ~shrink-swell   (moderately limited)	0.36	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	    0.68    0.45	  Moderately limited  ~shrink-swell   (moderately limited)	    0.45   	  Not limited   	
WtB2: Winfield	   Moderately limited   ~shrink-swell   (moderately limited)   ~wetness   (moderately limited)	  0.45    0.37	  Limited  ~wetness   (limited)  ~shrink-swell   (moderately limited)	  0.99    0.36	(limited)	  0.68    0.45 	  Moderately limited  ~shrink-swell   (moderately limited) 	  0.45   	  Not limited 	

### Building Site Development

Map symbol and soil name	Dwellings without basements		Dwellings with basements		  Small commercial buildings		Local roads and streets		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WtC2: Winfield	    Limited	 	    Limited	   	    Very limited		    Limited		    Limited	
willield	slope   (limited)   shrink-swell   (moderately limited)	0.83	wetness   (limited)   ~slope   (limited)	0.99    0.83	very limited   ~slope   (very limited)  ~shrink-swell   (moderately limited)	1.00    0.45	minited   ~slope   (limited)   ~shrink-swell   (moderately limited)	0.84	~slope   (limited)	0.84
	<pre> ~wetness   (moderately limited)    </pre>	0.37     	<pre>  ~shrink-swell   (moderately limited)    </pre>	0.36     		     		     		     _